

IN THE ABSTRACT

Please amend the Abstract of the Disclosure as follows:

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Ionic gel polymer electrolytes for rechargeable polymer batteries preferably are are. ~~In preferred forms, a gel polymer precursor electrolyte is~~ formed by dissolving a gelling agent into organic liquid electrolytes, and then gelling the precursor in situ at elevated temperature after pouring it into a battery case that contains a cathode, an anode and a separator. The gel polymer electrolytes exhibit excellent ionic conductivity of up to about 10^{-2} S/cm and voltage stability for lithium rechargeable batteries. Most preferably, the gel polymer electrolyte is the reaction product of (A) a heterocyclic ~~an amine-group containing material nitrogen-group containing~~ polymers, copolymers, oligomers or monomers that are capable of reacting with halogen compounds or epoxy compounds, such as, ~~polymers, copolymers, oligomers or monomers containing primary, secondary or tertiary amines~~ (preferably a vinylpyridine), and (B) halide or epoxy-group containing polymers, copolymers, oligomers or monomers that are capable of reacting with nitrogen-containing compounds, such as polymers, copolymers, oligomers or monomers containing alkylene halides or halomethyl group substituted aromatic units or at least one epoxy unit. ~~Especially preferred (A) materials include pyridine compounds, and most preferably vinylpyridines, such as poly(2-vinylpyridine) and copolymers thereof. Especially preferred compounds useable as material (B) include bis(bromomethyl)benzene, α,α' -dibromoxylene, diiodoalkanes, 3,4-epoxycyclohexylmethyl 3',4'-epoxycyclohexanecarboxylate, butadiene diepoxide, and butanediol diglycidyl ether.~~